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NEXT GENERATION ACCOUNTABILITY MODEL

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BACKGROUND

South Dakota began the process of developing a new statewide accountability model in September 2011. The Department of Education assembled a group of 23 individuals representing key stakeholder groups to provide recommendations regarding a next-generation accountability model for South Dakota. Those individuals included: school administrators, teachers, tribal educators, state board members, legislators, and representatives of higher education and state education associations.

To date, the group has met four times. During that time period, the U.S. Department of Education also issued its ESEA Waiver Flexibility package.

The resulting proposed Accountability Model, summarized here, is a product assembled by the South Dakota Department of Education. It is a model intended to be legitimate and fair; useful to educators and administrators; easily understood by the public; and, most importantly, one that promotes continuous improvement for individual students, as well as for schools.

SUMMARY

South Dakota's proposed next-generation accountability model takes a thoughtful, balanced approach to defining the indicators of a strong education system. Rather than focusing on student proficiency on a single assessment, it encompasses multiple indicators, including student growth, that are critical pieces in preparing students for the rigors of the 21st century world.

The proposed model will continue to hold schools accountable for student proficiency and closing achievement gaps through continued annual public reporting of disaggregated student outcomes in math and reading. However, this more robust model reaches beyond the once-a-year summative assessment, to offer a more credible and meaningful model. The expectation is that the model will be used to inform school administrators, teachers and the public as to how schools *and* individual students are progressing. And with its emphasis on continuous improvement, it sets a high bar for ongoing reflection and goal setting.

The proposed next-generation accountability model is based on the following key indicators:

1) Student Achievement
2) Academic Growth
3) College & Career Readiness (High School) OR Attendance (Elementary and Middle School)
4) Effective Teachers and Principals
5) School Climate

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OVERVIEW

The proposed accountability model uses a 100-point index, called the School Performance Index. A numeric value will be assigned to each of the five indicators on the index. These values will be added to create a final Overall Score. Two distinct models will be used: 1) one for High School accountability, and 2) one for Elementary and Middle School accountability.

School Performance Index

High School (see detailed breakdown page 5)

Indicator #1	Indicator #2	Indicator #3	Indicator #4	Indicator #5	OVERALL SCORE
Student Achievement	Academic Growth	College & Career Readiness	Effective Teachers & Principals	School Climate	100 points

Elementary and Middle School (see detailed breakdown page 5)

Indicator #1	Indicator #2	Indicator #3	Indicator #4	Indicator #5	OVERALL SCORE
Student Achievement	Academic Growth	Attendance	Effective Teachers & Principals	School Climate	100 points

Annual Measurable Objectives (AMOs): Targets and Goals

Under the proposed model, each school has its own unique AMO goal, with yearly progress defined as meeting the annual targets toward that goal. AMO goals and targets are set as follows:

- In the first year of each five-year cycle and for each level (elementary/middle school and high school), an Overall Score on the School Performance Index is calculated for each public school and ranked.

- Schools are placed in five groups based on the ranking:
  - Group 1 schools are performing at or above the 90th percentile
  - Group 2 schools are performing at or above the 70th but below the 90th percentile
  - Group 3 schools are performing at or above the 50th but below 70th percentile
  - Group 4 schools are performing at or above the 30th but below 50th percentile
  - Group 5 schools are performing below the 30th percentile

- For Schools in Groups 2 through 5 (schools falling below the 90th percentile) the annual AMO targets are set in equal increments for each year until the end of the five-year cycle – with an ultimate goal of moving to the next highest group.

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- Schools in Group 1 (at or above the 90th percentile) are expected to maintain a score above the cut score set in Year 1 for the duration of the five-year cycle.

Example:

- The range of all schools' scores in Year 1 of a five-year cycle ranged between 78.17 points and 12.08 points.
- Based on all the schools' scores, the following scores are determined to be the transition points for each Group based on the percentiles.

Group	AMO Goal in 4 years	Year I Percentile
Group 1	**	**
Group 2	72.88	90th
Group 3	68.65	70th
Group 4	64.4	50th
Group 5	58.47	30th
** Group 1 is expected to maintain a score above the 90th percentile score set in Year 1		

- Each school's Year 1 base score establishes their Group placement.

- Based on that placement, the AMO for the five-year period for that school is set. The school's current score is subtracted from the five-year AMO Goal to determine the expected growth over the next four years. This expected growth is then divided by four years to calculate the Expected Annual Growth. The Expected Annual Growth is then added to the Year 1 score to establish the AMO target for Year 2. The Year 3 – 5 AMOs are ascertained by adding the Expected Annual Growth to each year.

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	Year 1 Score (Base Year)	Group	Goal in 4 Years	Goal minus Year 1 Score	Expected Annual Growth	Year 2 AMO	Year 3 AMO	Year 4 AMO	Year 5 AMO***
School A	74.94	Group 1	**	**	**	**	**	**	**
School B	71.77	Group 2	72.88	1.11	0.28	72.05	72.33	72.61	72.88
School C	66.78	Group 3	68.65	1.87	0.47	67.25	67.72	68.19	68.65
School D	61.58	Group 4	64.40	2.82	0.71	62.29	63.00	63.71	64.40
School E	53.08	Group 5	58.47	5.39	1.35	54.43	55.78	57.13	58.47

** School A is in Group 1 so is expected to maintain a score above the 90th percentile score set in Year 1

*** Slight difference due to rounding. All numbers are rounded to the nearest hundredth

Phase-In of School Performance Index

2011-12 Existing accountability model used for final year

2012-13 School Performance Index in place with all indicators except Effective Teachers and Principals and School Climate at both levels, and Growth at High School level

2013-14 School Performance Index same indicators as in 2012-13

2014-15 Add Growth indicator at High School level (assuming valid assessment tool available)

Add Effective Teachers and Principals indicator (assuming proper evaluation instruments/models for determining student growth in place)

Add School Climate indicator (assuming proper tool is in place)

Reset distribution, Groups and goals

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INDEX & INDICATORS: High Schools

At the High School level, the School Performance Index will include encompass the following key indicators:

2012-13 & 2013-14 Points: 50	2012-13 & 2013-14 Points: 0	2012-13 & 2013-14 Points: 50	2012-13 & 2013-14 Points: 0	2012-13 & 2013-14 Points: 0
2014-15 Points: 25	2014-15 Points: 25	2014-15 Points: 20	2014-15 Points: 20	2014-15 Points: 10
Indicator #1: **Student Achievement** --Percent proficient or higher in English language arts and mathematics in grade 11 on state assessment Calculation includes: --Gap Group score --Non-Gap Group score --Unduplicated count (calculated upon the % of gap and non-gap students in the school population)	Indicator#2: **Academic Growth** --Value added (linear regression) model based on student growth –factoring for certain variables	Indicator #3: **College & Career Ready** -- Completer rate -- Percent of students pursuing postsecondary 16 months after graduation --Percent of ACT student scores whose math sub-score is 20 or higher --Percent of ACT student scores whose English sub-score is 18 or higher	Indicator #4: **Effective Teachers & Principals** --Aggregate number of teachers in each of four categories: Unsatisfactory, Basic, Proficient, Distinguished	Indicator #5: **School Climate** --Measurement tool needs to be determined
Implemented in 2012-13	Implemented in 2014-15	Implemented in 2012-13	Implemented in 2014-15	Implemented in 2014-15

INDEX & INDICATORS: Elementary & Middle Schools

At the Elementary and Middle School levels, the School Performance Index will include encompass the following key indicators:

2012-13 & 2013-14 Points: 40	2012-13 & 2013-14 Points: 40	2012-13 & 2013-14 Points: 20	2012-13 & 2013-14 Points: 0	2012-13 & 2013-14 Points: 0
2014-15 Points: 25	2014-15 Points: 25	2014-15 Points: 20	2014-15 Points: 20	2014-15 Points: 10
Indicator #1: **Student Achievement** --Percent proficient or higher in English language arts and mathematics in grades 3-8 on state assessment Calculation includes: --Gap Group score --Non-Gap Group score --Unduplicated count (calculated upon the % of gap and non-gap students in the school population)	Indicator#2: **Academic Growth** --Value added (linear regression) model based on student growth –factoring for certain variables	Indicator #3: **Attendance**	Indicator #4: **Effective Teachers & Principals** --Aggregate number of teachers in each of four categories: Unsatisfactory, Basic, Proficient, Distinguished	Indicator #5: **School Climate** --Measurement tool needs to be determined
Implemented in 2012-13	Implemented in 2012-13	Implemented in 2012-13	Implemented in 2014-15	Implemented in 2014-15

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INDICATOR #1: Student Achievement

At the High School level, the student achievement score will be based on the percent of students scoring proficient or advanced on the statewide assessment in reading and math delivered in 11th grade.

At the Elementary and Middle School levels, the student achievement score will be based on the percent of students scoring proficient or advanced on the statewide assessment in reading and math in grades 3-8.

Points will be given for two separate groups – the "Gap Group" and the "Non-Gap Group." Points for the Gap Group and Non-Gap Group will be weighted and summed to determine the final score for student achievement.

What is the Gap Group?

The Gap Group is an **aggregate count of student groups in our state that have historically experienced achievement gaps.** At this time, South Dakota will include the following student groups in its Gap Group: Black, Native American, Hispanic, Economically Disadvantaged, Students with Disabilities, Limited English Proficient, Migrant.

To calculate the combined student Gap Group, unduplicated counts of students who score proficient or higher on the statewide assessment and are in the identified student groups would be summed. This will yield a **single gap number** of proficient or higher students in the "Gap Group," **with no student counting more than one time**, and all students in included groups being counted once.

Example: Unduplicated Count

- Addy -- Special Education and Economically Disadvantaged subgroups. Scores Proficient.
- Marcus – Limited English Proficient and Economically Disadvantaged subgroups. Scores Basic.
- Cheyenne – Native American. Scores Advanced.

Based on the above, an unduplicated count would show three total students with two of the students (Addy and Cheyenne), or 66.66 percent, counting as proficient or higher in the Gap Group.

The Non-Gap Group includes all students not in the Gap Group. Those scoring proficient or higher in the Non-Gap Group would be included in the student achievement calculation.

Under the proposed system, the N-size will be 10. Using an aggregated Gap Group, this means almost every school in the state will have a focus on students in Gap Groups. Individual subgroups of students will still be disaggregated and reported, but not for accountability purposes.

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Example: Student Achievement Calculation
Overall possible points: 25

Step 1: Divide maximum allowable index points in half to allow equal weight for reading and math
Step 2: Calculate the # of students that fall into the Gap Group and Non-Gap Group
Step 3: Calculate the % of students that fall into the Gap Group and Non-Gap Group by dividing each by the total number of students
Step 4: Take the overall possible points (column 1) times the % of students (column 3) in each group to get the weighted points for each group
Step 5: Calculate the % Proficient/Advanced for each group
Step 6: Calculate the score for each group by multiplying the % Proficient/Advanced (column 5) times the weighted points for each group (column 4).
Step 7: The sum of these represents total points for Student Achievement category

	Step:	**1**	**2**	**3**	**4**	**5**	**6**	
		Overall Index Points Possible	Number of Students	% of Students	Weighted Points (% Students X Points)	% Proficient/ Advanced	Score (Weighted Points X % P/A)	
Math	GAP	12.5	71	26%	3.27	58%	1.90	
	Non-Gap		200	74%	9.23	83%	7.66	
Reading	GAP	12.5	71	26%	3.27	62%	2.03	
	Non-Gap		200	74%	9.23	88%	8.12	
	TOTAL	25			25.00		**9.56**	**Step 7**
							TOTAL POINTS for Student Achievement Category	

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INDICATOR #2: Academic Growth

At the High School level, a Growth calculation will not be used for accountability purposes at the present time. When additional data points that can be used to accurately measure growth are in place, the state will consider a Growth model for high school.

At the Elementary and Middle School levels, a Growth calculation will be used for accountability purposes.

South Dakota is proposing a Value Added Model (VAM) for Growth that employs linear regression statistical tools. Value Added Models rely on student demographic characteristics and prior achievement as statistical controls in order to isolate the specific effects of a particular school, program or teacher on student academic progress. South Dakota utilizes its own variation of VAM in the state's Teacher Incentive Fund grant, which affords us some data and experience for the Next Generation Accountability Model.

Example: Academic Growth Calculation

% Students exceeded projected growth	80%
X Possible Index points	25
Score	20
	TOTAL points for Academic Growth Indicator

INDICATOR #3: College & Career Readiness OR Attendance

At the Elementary and Middle School levels, the Indicator will be attendance rate. A school's attendance percentage would be multiplied by the total points for this category to come up with a score for this Indicator.

EXAMPLE: School A has an attendance rate of 90%. If total points for this indicator are 20, School A's score for this indicator would be 18.

At the High School level, the College & Career Readiness score will be based on the factors noted below. Each of the factors will be weighted.

1) Completer rate – For accountability purposes, South Dakota is proposing to use the percent of students who in the current school year have attained one of the following: a) diploma, b) GED, c) fulfilled the requirements of an Individual Education Plan (IEP), d) fulfilled the requirements of a Language Acquisition Plan (LAP)

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2) Percent of students pursuing postsecondary 16 months after graduation – This calculation includes data from any postsecondary facility that reports to the National Student Clearinghouse
3) Percent of students whose ACT math sub-score is 20 or above and English sub-score is 18 or above

Example: Calculating College & Career Readiness Calculation
Overall possible points: 20

Step 1: Calculate weighted points for each factor by multiplying weighted % for each factor by total possible points
Step 2: Calculate the rate for each factor
Step 3: Calculate the score for each factor by multiplying the rate times the weighted points for each group
Step 4: The sum of these represents total possible points for College and Career Readiness

Step:		**1**	**2**	**3**	
Factors	Weight as %	Weighted Points	Rate as %	Score	
Completer Rate	50.0%	10.00	98%	9.80	
% ACT Score 20 or Greater for Math	12.5%	2.50	67%	1.68	
% ACT Score 18 or Greater for English	12.5%	2.50	69%	1.73	
% students pursuing postsecondary in 16 months	25.0%	5.00	72%	3.60	
Total possible points	100.0%	20.00		16.81	**Step 4**
				TOTAL POINTS for College & Career Readiness	

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INDICATOR #4: Effective Teachers & Principals

At both levels, the Effective Teachers & Principals score would be based on the percentage of teachers in the school who perform at the Proficient or Distinguished levels on a statewide evaluation instrument. The percentage of teachers who score at the Proficient or Distinguished levels is multiplied by total possible points.

- 50 percent of that performance rating must be based on quantitative measures of student academic growth in one school year.
- 50 percent of that performance rating must be based on qualitative components that are measurable and evidence-based.

Much work needs to be done related to this indicator; therefore, it will not be included in the School Performance Index until 2014-15. Work groups will be needed to address both the teacher evaluation piece and the principal standards and evaluation piece, as well as building appropriate assessments for this purpose. While standards are now in place for teachers, there are no such statewide standards for principals.

Finally, South Dakota does not currently have valid and reliable measurements in place that would evaluate individual student growth within an academic year, which could then be tied to teacher and principal performance. At this time, it does appear that SMARTER Balanced products will allow for quantitative measures of student growth for teacher evaluation purposes in English language arts and math (only) by 2014-15. For those teachers in grades and subjects for which there is no state-validated testing measure for the quantitative portion of the evaluation, a district approved assessment using objective measures of teacher effectiveness including student performance on unit or end-of-year tests shall be used.

Example: Effective Teachers & Principals Calculation

Step:	**1**	**2**
Overall Index Points Possible	% Teachers Proficient & Distinguished	Score (% Teachers X Overall Points)
20	71%	**14.2**
		Total Points Effective Teachers/Principals Indicator

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INDICATOR #5: School Climate Survey

Positive school climate and a healthy school environment are associated with academic achievement, effective risk prevention efforts and positive youth development. This indicator is designed to address school climate issues such as bullying and violence and other problems that create conditions that negatively impact learning. It would include a comprehensive assessment of the major spheres of school life such as safety, relationships, teaching and learning, and healthy environment.

At both levels, the School Climate score will be measured using reliable statewide assessment tools. A work group will be convened to address this indicator and select or develop measurement tools. These tools may include parent, student, and staff surveys and/or assessment tools related to school policies, programs, and practices. This indicator will not be included in the School Performance Index until 2014-2015.

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Classification of Schools
Under the proposed accountability model, there would be three classifications of schools that determine recognition or support.

- **Exemplary Schools** include both 1) high-performing schools whose Overall Score on the School Performance Index is at the 95th percentile or higher and 2) high-progress schools that rank in the 95th percentile for improvement of Indicator 2 over a period of two years. **All public schools are eligible** for this classification.

- **Focus Schools** are schools whose Overall Score on the School Performance Index is at/or below the 15th percentile but above the 5th percentile. The total number of Focus Schools must be at least 10 percent of the Title I and Title I eligible schools in the state. Each district with one or more of these schools must implement, for two years, meaningful interventions aligned with the turnaround principles. This classification applies to **Title I and Title I eligible schools**.

- **Priority Schools are** schools whose Overall Score on the School Performance Index is at/or below the 5th percentile. The total number of Priority Schools must be at least five percent of the Title I and Title I eligible schools in the state. Each district with one or more of these schools must implement, for three years, meaningful interventions aligned with the turnaround principles. This classification applies to **Title I and Title I eligible schools**.

Recognition and Support
Exemplary Schools will receive special recognition through a statewide branding effort designed to draw attention to their outstanding performance.

Priority Schools will receive targeted state- and district-level support to include, among other things: participation in the Academy of Pace-Setting Districts, utilization of Indistar to develop a school transformation plan focused on rapid turnaround indicators, and a four-lens data analysis to strengthen the instructional program based on student needs.

Focus Schools will receive some state- and district-level support, including support for the IndiStar analysis of effective practices.